



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
Budget Development, Planning and Administration
State Planning Coordination

November 18, 2008

Laura Swiski
LRHA InSite Design
154 S. Governors Avenue
Dover, De 19904

RE: PLUS review – 2008-10-01; Woodmill Apartments

Dear Ms. Swiski:

Thank you for meeting with State agency planners on October 22, 2008 to discuss the proposed plans for the Woodmill Apartments project to be located between Commerce Way and Farm View Drive within the City of Dover.

According to the information received, you are seeking site plan approval through the City of Dover for 6 apartment buildings with 36 units in each building.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the City of Dover is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the City.

Executive Summary

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.***

State Strategies/Project Location

- This project is located in Investment Level 1 according to the *Strategies for State Policies and Spending*. This site is also located in the City of Dover. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Our office has no objections to the proposed development of this project in accordance with the relevant City codes and ordinances.

Street Design and Transportation

- DelDOT supports the idea of connecting the proposed apartments to the existing ones and serving the assembled development by way of both Commerce Way and Farmview Drive South.

Natural and Cultural Resources

This office has received the following comments from State agencies:

Office of State Planning Coordination – Contact: David Edgell 739-3090

This project is located in Investment Level 1 according to the *Strategies for State Policies and Spending*. This site is also located in the City of Dover. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Our office has no objections to the proposed development of this project in accordance with the relevant City codes and ordinances.

State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685

No comments received

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Investment Properties Association seeks to develop a 216-unit expansion of the existing Woodmill Apartments on 13.97 acres of a 22.97-acre parcel (Tax Parcel ED-05-076.10-02-07.03-000) in the City of Dover. The land fronts on the west (or north) side of Commerce Way in the Enterprise Business Park. The parcel has been split-zoned RG-2 and IPM, in anticipation of the subject plan, and the plan would create a 9-acre business park lot on Commerce Way in addition to the 216-unit apartment complex. The apartments would have access on Commerce Way but would also connect through the existing apartment complex to Farmview Drive South and from there through the Woodmill development to Forrest Avenue (Delaware Route 8).

- 1) Because the apartments would access a City street (Commerce Way), this project is necessarily outside DelDOT jurisdiction. With that said, they recommend that the City consider requiring centerline and shoulder striping on Commerce Way from North Street to at least the site entrance.
- 2) The PLUS application mentions that sidewalks will be provided but does not say where. DelDOT supports the idea of connecting the proposed apartments to the existing ones and serving the assembled development by way of both Commerce Way and Farmview Drive South. However, they would expect bicycle and pedestrian traffic, and to some extent automobile traffic, to increase on the main north-south driveway through the existing complex. It is recommended that the developer install traffic calming and signs along that driveway. Sidewalks and crosswalks would be desirable and should certainly be required in the proposed development, but it may not be practical to provide them in the existing complex.
- 3) At the PLUS meeting, the City mentioned concerns about the possible effects of traffic on Enterprise Business Park between the site entrance and Saulsbury Road and on the park entrance at Saulsbury Road. The development does meet DelDOT's current warrants for a traffic impact study. If the City finds it appropriate to require one, DelDOT would be willing to assist with the scoping and review of that study.
- 4) If a Letter of No Objection will be needed for this development, the developer's site engineer should contact the DelDOT Subdivision Manager for Dover, Mr. Julio Seneus, in that regard. Mr. Seneus may be reached at (302) 760-2145.

**The Department of Natural Resources and Environmental Control – Contact:
Kevin Coyle 739-9071**

Soils

According to the Kent County soil survey, Hambrook-Urban land complex (HkB) and Urban land complex (Up) were mapped in the immediate vicinity of the proposed construction. Hambrook-Urban land complex is a well-drained upland soil mapping unit having a mixture of natural and undisturbed soils that have been altered through grading, filling, and/or excavation practices. Urban land complex is a soil mapping unit having an indeterminate drainage character (although probably well-drained) that has been entirely modified through extensive filling, grading, and/or excavation practices (See figure 1).

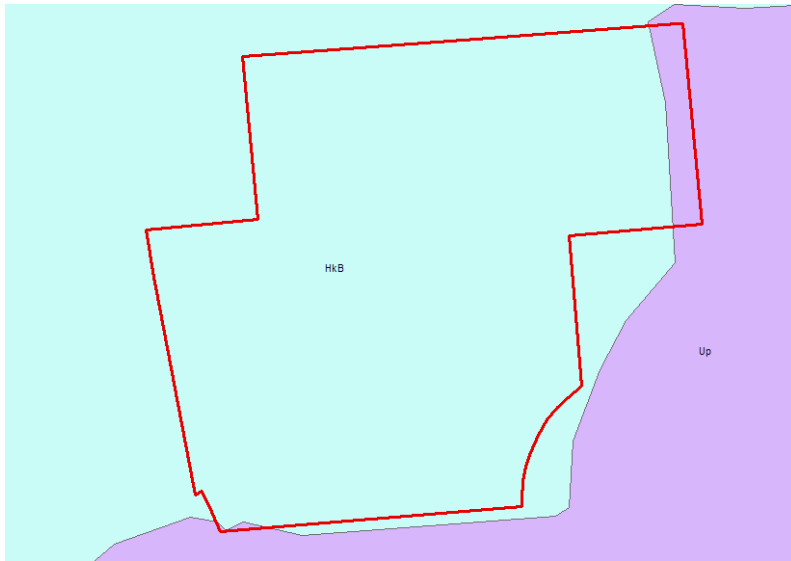


Figure 1: NRCS soil survey update mapping in the immediate vicinity of the Windmill Apartments project.

Impervious Cover

Based on a review of the PLUS application form, post-construction surface imperviousness was projected to reach 51 percent. However, given the projected scope and density of this project, this estimate appears to understate the actual amount of created post-construction surface imperviousness. When calculating surface imperviousness, it is important to consider all created forms of constructed surface imperviousness (i.e., rooftops, sidewalks, roads, and stormwater management ponds) in the calculation for surface imperviousness; otherwise, an inaccurate assessment of this project's environmental impacts will result. Therefore, surface imperviousness should be recalculated if any of the above-mentioned forms of surface imperviousness have been excluded.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the St. Jones watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary

to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. In the St. Jones watersheds, a post-development TMDL reduction level of 40% will be required for nitrogen and phosphorus. Additionally, a TMDL reduction level of 90% will be required for bacteria.

TMDL Compliance through the Pollution Control Strategy (PCS)

As stated above Total Maximum Daily loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the St. Jones watershed. The TMDL calls for a 40% reduction in nitrogen and phosphorus, while a TMDL reduction of 90% will be required for bacteria; both nutrient and bacteria reductions must be from baseline conditions. The Department developed an assessment tool to evaluate how your proposed development may reduce nutrients and bacteria to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of BMPs such as wider vegetated buffers along watercourses/wetlands, increasing the amount of passive, wooded open space, use of pervious paving materials to reduce surface imperviousness, and the deployment of green-technology stormwater management treatment technologies. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Water Supply

The project information sheets state water will be provided to the project by the City of Dover via a public water system. DNREC records indicate that the project is located within the public water service area granted to the City of Dover under Certificate of Public Convenience and Necessity 90-CPCN-07.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Sediment and Erosion Control/Stormwater Management

This project is located within the Puncheon Run watershed which has known drainage problems. Please schedule a pre-application meeting with Jared Adkins of the Kent

Conservation District at (302) 741-2600, ext. 3, before proceeding with further site design.

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. It is strongly recommended that the owner and consultant contact the Kent Conservation District to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan before going further with the design of this site. The site topography, soils mapping, pre- and post- development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Kent Conservation District. Contact Jared Adkins, Program Manager, at the Kent Conservation District at (302) 741-2600, ext. 3 for details regarding submittal requirements and fees.
- Because of the parcel's location in an impaired watershed and the amount of impervious surface, green technology BMPs and low impact development practices should be considered a priority to reduce stormwater flow and to meet water quality goals.

Drainage

- The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of onsite storm water. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. There are known drainage problems downstream of this project. Notify downstream landowners of the change in volume of water released on them.
- Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.

Floodplains

This parcel is not located in a Special Flood Hazard Area, but it is located in the Puncheon Run Watershed. The City of Dover has higher stormwater regulations for development in this area to help alleviate downstream flooding.

Nuisance Waterfowl

Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species.

The Division of Fish and Wildlife does not provide goose control services, and if problems arise, the property owner/land manager will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Recommendation: Exclusion is one of the most effective methods at deterring geese. Even though geese can fly over a fence, if they constantly have to fly between land and water the area is less desirable. If fencing is not a desired option, we recommend native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds. When the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond. The vegetation also blocks the ability to easily move between land and water.

At this time, they do not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the property owner/land manager.

Site Investigation and Restoration

One (1) Site Investigation & Restoration Branch (SIRB) sites were found within a half mile radius of the proposed site: Scott Paper Co. (DE-0060) located 0.11 miles south of the proposed site.

Scott Paper received a No Further Action designation in 1984.

Based on the previous agricultural use of the proposed project site, which may have involved the use of pesticides and herbicides, SIRB recommends that a Phase I Environmental Site Assessment be performed prior to development. In addition, should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.

Under/Aboveground Storage Tanks

There is one (1) inactive LUST site located within a quarter mile from the proposed project.

Name: Scott Paper Company

Facility ID: 1-000434

Project: K9203054

Should any underground storage tanks or petroleum contaminated soil be discovered by any person during construction, the DNREC-TMB at (302) 395-2500 and the DNREC Emergency Response Hotline at (800) 662-8802 must be notified within 24 hours.

Should any contamination be encountered, PVC pipe materials will have to be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.

Also, please note that if any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMB. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMB.

Air Quality

Housing developments may unnecessarily emit, or cause to be emitted, significant amounts of air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:

- Emissions that form ozone and fine particulate matter; two pollutants relative to which Delaware currently violates federal health-based air quality standards,
- The emission of greenhouse gases which are associated with climate change, and
- The emission of air toxics.

Air emissions generated from housing developments include emissions from:

- Area sources like painting, lawn and garden equipment and the use of consumer products like roof coatings and roof primers.
- The generation of electricity needed to support the homes in your development, and
- Car and truck activity associated with the homes in your new development.

These three air emissions components (i.e., area, electric power generation, and mobile sources) are quantified below, based on a per household/residential unit emission factor that was developed using 2002 Delaware data. These emissions in the table represent the actual impact the Woodmill Apartment development may have.

Emissions Attributable to Woodmill Apartment Subdivision (Tons per Year)

	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NO _x)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Direct Residential	6.7	0.7	0.6	0.8	27.1
Electrical Power Generation	ND*	2.6	9.2	ND*	1,359.5
Mobile	16.6	13.7	10.1	0.9	1,386.6
Total	23.3	17.0	19.9	1.7	2,773.2

(*) Indicates data is not available.

Note that emissions associated with the actual construction of the subdivision, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.

Recommendations:

The applicant shall comply with all applicable Delaware air quality regulations. These regulations include:

Regulation 6 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Using dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Using covers on trucks that transport material to and from site to prevent visible emissions.
Regulation 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibiting open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibiting the burning of land clearing debris. • Prohibiting the burning of trash or building materials/debris.
Regulation 1145 – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> • Restricting idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

Additional measures may be taken to substantially reduce the air emissions identified above. These measures include:

- **Constructing only energy efficient homes.** Energy Star qualified homes are up to 30% more energy efficient than typical homes. These savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of increased energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.

- **Offering geothermal and/or photo voltaic energy options.** These systems can significantly reduce emissions from electrical generation, and from the use of oil or gas heating equipment.
- **Providing tie-ins to the nearest bike paths and links to any nearby mass transport system.** These measures can significantly reduce mobile source emissions.
- **Funding a lawnmower exchange program.** New lawn and garden equipment emits significantly less than equipment as little as 7 years old, and may significantly reduce emissions from this new development. The builder could fund such a program for the new occupants.

Additionally, the following measures will reduce emissions associated with the actual construction phase of the development:

- **Using retrofitted diesel engines during construction.** This includes equipment that are on-site as well as equipment used to transport materials to and from site.
- **Using pre-painted/pre-coated flooring, cabinets, fencing, etc.** These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
- **Planting trees at residential units and in vegetative buffer areas.** Trees reduce emissions by trapping dust particles and by replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

This is a partial list, and there are additional things that can be done to reduce the impact of the development on air quality. The applicant should submit a plan to the DNREC Air Quality Management Section which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Woodmill Apartment development. Air Quality Management Section points of contact are Phil Wheeler and Deanna Morozowich, and they may be reached at (302) 739-9402.

State Fire Marshal's Office – Contact: Duane Fox 856-5298

No comments received

Department of Agriculture - Contact: Scott Blaier 739-4811

The Delaware Department of Agriculture has no objections to the proposed project. The project is located within the City of Dover, and the *Strategies for State Policies and Spending* encourages environmentally responsible development in Investment Level I areas.

Right Tree for the Right Place

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

Do Not Plant List

Due to the high risk of mortality from insects and disease, the Delaware Forest Service does not recommend planting any of the following species:

Callery Pear
Leyland Cypress
Red Oak (except for Willow Oak)
Ash Trees

Please contact the Delaware Forest Service for more information at (302) 698-4500.

Native Landscapes

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Delaware Economic Development Office – Contact: Jeff Stone 672-6849

No comments received

Delaware Division of Public Health- Health Promotion Bureau- contact Michelle Eichinger (302) 744-1011

Ensuring that new residential and commercial development incorporates pedestrian- and bicycle-friendly features allows people to travel by foot or by bicycle and promotes physical activity as part of daily routines. Regular physical activity offers a number of health benefits, including maintenance of weight and prevention of heart disease, type 2 diabetes and other chronic diseases.¹ Research shows that incorporating physical activity into daily routines has the potential to be a more effective and sustainable public health strategy than structured exercise programs.² This is particularly important considering about 65% of adult Delawareans are either overweight or obese.³ This current obesity crisis is also affecting children. Approximately 37% of Delaware's children are overweight or obese⁴, which places them at risk for a range of health consequences that include abnormal cholesterol, high blood pressure, type 2 diabetes, asthma, depression and anxiety.¹

In Delaware, as in other states across the nation, certain patterns of land use can act as a barrier to physical activity and healthy eating for children and adults alike. Examples of such barriers include neighborhoods constructed without sidewalks or parks and shopping centers with full-service grocery stores situated too far from residential areas to allow for walking or biking between them.

This proposed development is in a Level 1 area. Developing is such an area is consistent with the *Strategies for State Policies and Spending*. DPH is committed to the *Strategies* and therefore, does support development in the proposed area.

DPH supports new development in and around existing towns and municipalities where compact and mixed land use patterns facilitate physical activity. As a way to promote physical activity and access to healthy foods, we recommend that the following amenities be included in the Woodmill Apartments Expansion plan:

Amenities to encourage active transportation

- Ensure that there are sidewalks, crosswalks and walking/bicycling paths connecting the neighboring residential developments, such as the neighboring Schutte Park.
- Designate bike paths to supplement the sidewalks already proposed in the plan so that residents can by foot or by bicycle to the plan's recreational amenities. In addition, install bike racks in convenient locations within the development.

Amenities to encourage recreation

- Although the developer plans to market the property to the 55+ years population, the incorporation of playgrounds would provide active recreation opportunities for children who visit. If feasible, consider including a walking path around the playground area.

¹ Nemours Health and Prevention Services (2005). *Delaware Children's Health Chartbook*, Newark, DE.

² Active Living by Design. *Transportation Fact Sheet*. Retrieved May 17, 2007, from http://www.activelivingbydesign.org/fileadmin/template/documents/factsheets/Transportation_Factsheet.pdf.

³ Delaware Health and Social Services (2008), *Division of Public Health, Behavioral Risk Factor Surveillance System (BRFSS), 1990-2007*.

⁴ Nemours Health and Prevention Services (2007). *2006 Delaware Survey of Children's Health Descriptive Statistics Summary, Volume 1*.

Delaware State Housing Authority – Contact Vicki Powers 739-4263

This proposal is for a site plan review of 216 apartments totaling 288,000 sq. ft. located between Commerce Way and Farm View Drive within the City of Dover. According to the *State Strategies Map*, the proposal is located in an Investment Level 1 area and inside the growth zone. DSHA supports this proposal because residents will have proximity to existing services, markets, and employment opportunities. Additionally, rental developments can be the most economical to construct, and are needed to meet the needs of low- and moderate-income families. Furthermore, rental communities give residents housing options and create a balanced housing stock for the community. DSHA's Statewide Housing Needs Assessment has identified a growing need for rental housing, particularly for the senior population.

Department of Education – Contact: John Marinucci 735-4055

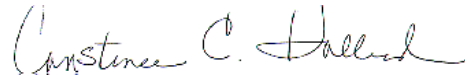
This proposed development is within the Capital School District boundaries. DOE offers the following comments on behalf of the Capital School District.

1. Using the DOE standard formula, this development will generate an estimated 108 students.
2. DOE records indicate that the Capital School Districts' *elementary schools are not at or beyond 100% of current capacity* based on September 30, 2007 elementary enrollment.
3. DOE records indicate that the Capital School Districts' *secondary schools are not at or beyond 100% of current capacity* based on September 30, 2007 secondary enrollment.
4. This development will create additional elementary and secondary student population growth which the school district will need to address.
5. The developer is strongly encouraged to contact the Capital School District Administration to address the additional students that this development will likely generate.
6. DOE requests developer work with the Capital School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the that school district.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in dark ink, appearing to read "Constance C. Holland". The signature is fluid and cursive, with the first name "Constance" being more prominent.

Constance C. Holland, AICP
Director

CC: City of Dover